

**Northern Cheyenne Tribe
30 MW Wind Energy
Development Grant**

**Renewable Energy Development
on
Tribal lands**

Joe Little Coyote, Sr., Tribal Planner

**Dale Osborn, President
Distributed Generation Systems, Inc. (Disgen)
Contractor**

Northern Cheyenne Tribe 30 MW Wind Energy Development Grant

Discussion Outline

Project Overview

Objectives

Project Location

Project Participants

Requested Technical Support



10-18-04

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Project Overview

- **Northern Cheyenne adopted a “Comprehensive Economic Development Strategy (CEDS) Planning Document” in 2001.**
- **CEDS mission is “To attain socio-economic independence through the development of a diversified and self-sustaining culturally appropriate reservation economy.”**
- **Northern Cheyenne Tribe has completed a wind energy feasibility study funded in 2002.**
- **The NCT Tribal Council passed a resolution to support a 30Mw wind facility and authorized the development grant application.**

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Project Objectives

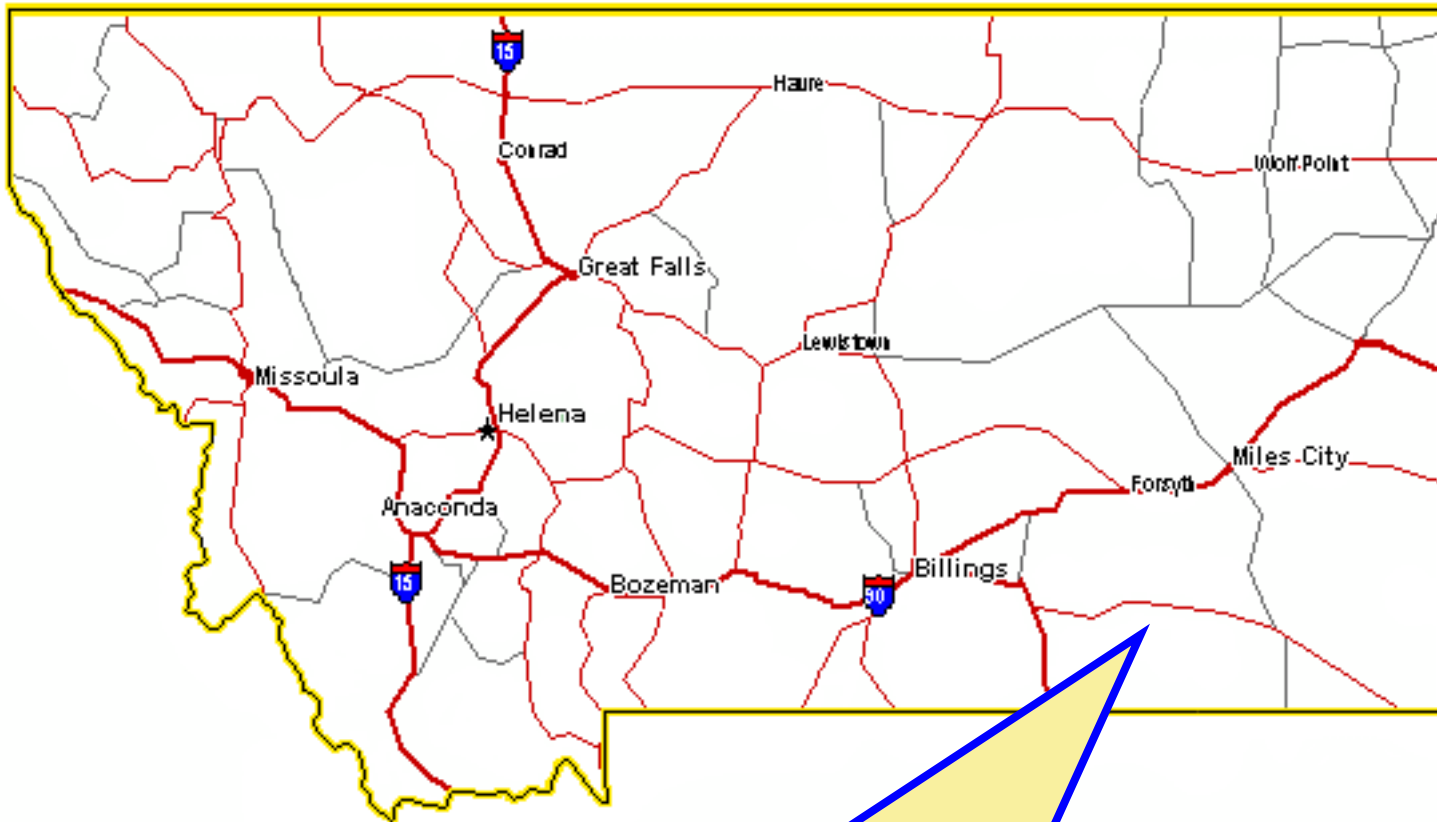
- 1. Complete all the development steps and contracts necessary to finance, construct and operate and maintain a 30 Mw wind facility on Tribal Trust Lands.**
- 2. Create maximum economic development through Tribal Ownership, if possible, of resulting projects.**

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Project Location

- **The Northern Cheyenne Reservation is located in southeastern Montana in Big Horn and Rosebud Counties.**
- **Tribal headquarters is located in Lame Deer, Montana.**
- **The wind site is a north-south plateau with an area of approximately 120 square miles.**
- **Meteorological studies have been conducted for ten years.**
- **A wind energy feasibility (DOE funded) has been completed.**

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10-18-04

Northern Cheyenne Reservation

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Project Location

- **Colstrip coal fired power plant is 25 miles to the north.**
- **Transmission and interconnection study has been completed by Electrical Consultants Inc. (ECI).**
 - **30MW to Tongue River can be achieved.**
- **Site can accommodate a 30 megawatt wind facility locally and a 150+ megawatt facility for export power.**



10-18-04

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Project Participants

- **Northern Cheyenne Nation**
 - **Program Director, Joe Little Coyote, Sr.**
- **Contractor**
 - **Distributed Generation Systems, Inc. (Disgen)**
 - **Dale Osborn, President**
 - **Ed McCarthy- Meteorological studies**
 - **Western EcoSystems Technology, Inc.-Avian assessment**
 - **Krista Gordon- Transmission review**

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Key Environmental Studies (I)

Completed Phase I Environmental Assessment:

No show-stoppers

Baseline Studies:

Avian Point Counts for Raptors

Raptor Nest Survey

Breeding Bird Survey

Vegetation Survey

Preparing Reports:

Baseline Study Report

Environmental Assessment (EA)

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Key Environmental Studies (II) Cultural Review

Ethnographic Study:

Interviews with Elders conducted by NCT Members

Class I File and Literature Search

Class III Inventory and Report:

Archeological Survey

Paleontological Survey

Northern Cheyenne Tribe 30 MW Wind Energy Development Grant

Transmission Analysis

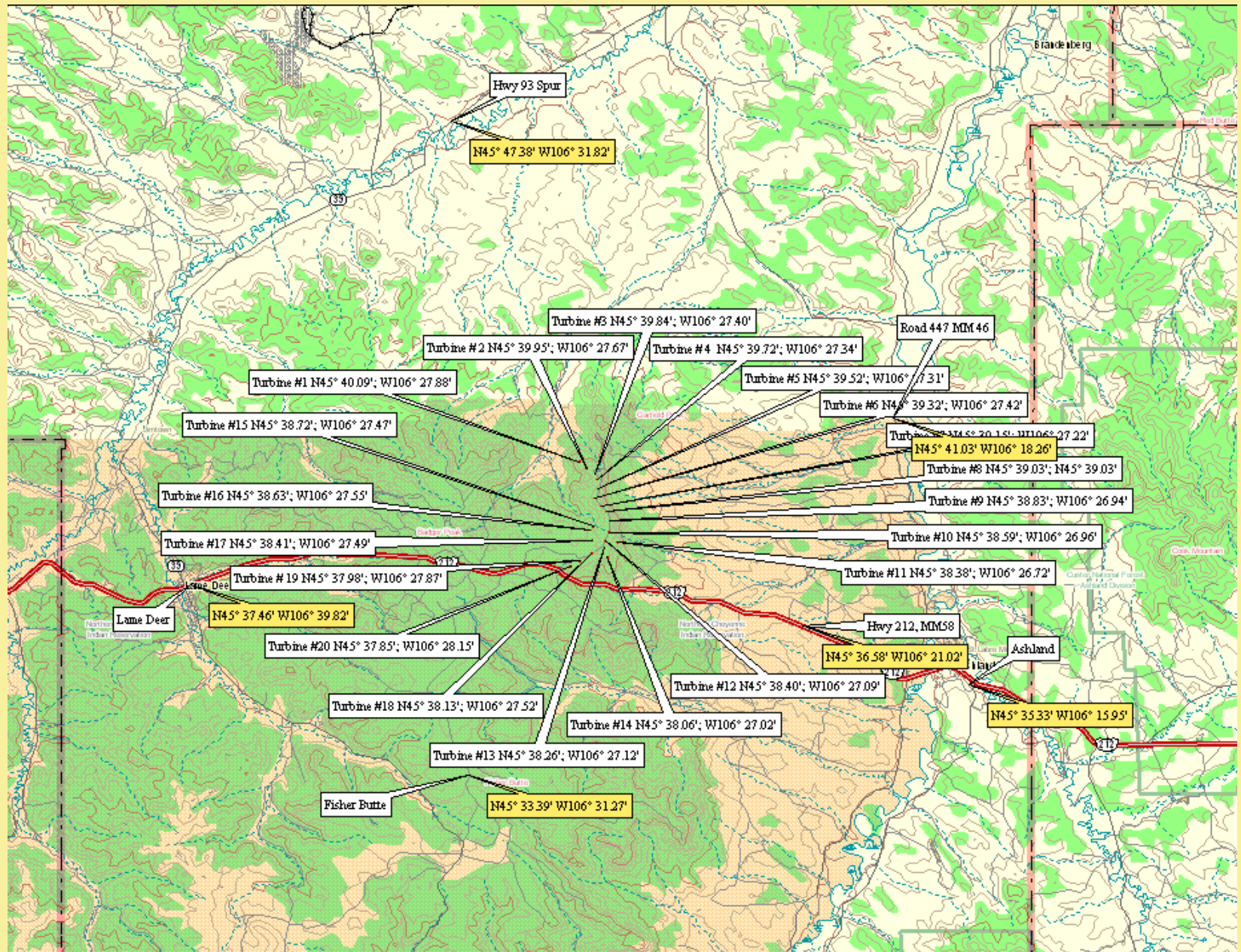
Interconnection analysis completed by Electrical Consultants Inc. (ECI).

The 69kV interconnection will result in significant line losses to Colstrip (6%).

Losses are included in the economic calculations.

Small substation will be required and is included in the economics.

Photo-sim Locations



Facing West on HW 212 from Ashland



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Fisher Butte Road



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Required Contracts**

- **NCT land agreements**
- **NCT permits**
- **BIA permits**
- **Interconnection
agreement**
- **Taxation agreements**
- **Power sales agreement**
- **Financing agreements**

Northern Cheyenne Tribe 30 MW Wind Energy Development Grant Status

- **Completed Avian Studies with NCT, USF&WS and BIA**
- **Conducted several Scoping Meetings**
- **Completed Interconnection Studies**
- **Bid into two solicitations, not selected**
- **Project could be constructed in 2005**

Northern Cheyenne Tribe
30 MW Wind Energy
Development Grant
Power Purchase Agreement

- **Expect a negotiated PPA with one of three entities**
- **Renewable Energy Credits (RECs) may be unbundled from physical energy and sold separately**
- **Premium pricing may be achieved from tribal RECs**